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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,168	06/23/2004	Woo-Young Lim	51876P637	9193

7590 10/06/2008  
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EXAMINER
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CZEKAJ, DAVID J

ART UNIT	PAPER NUMBER
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2621

MAIL DATE	DELIVERY MODE
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10/06/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/500,168	<b>Applicant(s)</b> LIM ET AL.	
	<b>Examiner</b> DAVID CZEKAJ	<b>Art Unit</b> 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8-13 and 18 is/are rejected.
- 7) ☒ Claim(s) 4-7 and 14-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

On pages 8-9, applicant argues that Paek fails to disclose segmenting a picture temporally and storing the motion picture shape descriptor as metadata. While the applicant's points are understood, the examiner respectfully disagrees. Paek discloses in column 22, lines 10-30 and column 23, lines 10-15, video objects that have temporal parameters. Hence, when Paek discloses in column 16, lines 30-40, segmenting the objects, Paek is segmenting the objects temporally. Paek further discloses in column 17, lines 1-7, the use of image descriptors. One of these image descriptors, as seen in column 15, lines 10-15, is a shape descriptor. While Paek fails to explicitly disclose metadata, Paek does disclose in column 14, lines 10-15, providing these descriptors as links, or metadata, which as described in column 17, lines 31-35, is later used for a metasearch. Therefore the rejections have been maintained.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paek et al. (7143434), (hereinafter referred to as "Paek").

Regarding claim 1, Paek discloses an apparatus that relates to describing multimedia information (Paek: column 1, lines 15-18). This apparatus comprises

“a motion picture segmentation means for segmenting a motion picture temporally” (Paek: column 16, lines 29-40, wherein the segmentation is the extraction; column 23, lines 10-17), “a motion picture shape descriptor abstracting means for abstracting a shape descriptor from the segmented motion picture” (Paek: column 9, lines 1-24; column 14, lines 15-21; column 16, lines 30-40, wherein the abstracting is the feature extraction), and “a motion picture storing means for storing the shape descriptors” (Paek: column 17, lines 1-7, wherein the shape descriptors are stored in the description record). While Paek fails to explicitly disclose storing the descriptors as metadata, Paek does disclose storing the descriptors and performing a metasearch for the descriptors (Paek: column 17, lines 1-7 and 30-40). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the metadata storage in order to provide a fast and easy way to find data associated with objects.

Regarding claim 2, Paek discloses "abstracting shape information corresponding to one object from the picture" (Paek: column 16, lines 30-40), "abstracting shape vector descriptor sequence from the shape information" (Paek: column 14, lines 15-20, wherein the sequence is the code element), and "abstracting a shape descriptor from the descriptor sequence" (Paek: column 14, lines 15-20; column 16, lines 19-40, wherein the descriptor is made up of the value and code element).

Regarding claim 3, although not disclosed, it would have been obvious to use a variance or standard deviation shape descriptor (Official Notice). Doing so would have been obvious in order to easily indicate the change in the object.

Regarding claim 12, note the examiners rejections for claims 1-2.

Regarding claim 13, note the examiners rejection for claim 2.

3. Claims 8-11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over et al. (7143434), (hereinafter referred to as "Paek") in view of Kan et al. (6728314), (hereinafter referred to as "Kan").

Regarding claim 8, note the examiners rejection for claim 1, and in addition Paek discloses "arranging the motion picture shape descriptors in the order of similarity from small to large" (Paek: column 17, lines 35-45; column 18, lines 22-25, wherein the ranking indicates the order of similarity). However, Paek fails to disclose calculating the similarities as claimed. Kan teaches that prior art segmentation techniques cannot solve the problems of still object segmentation and inconvenience (Kan: column 2, lines 6-7). To help alleviate this problem, Kan discloses "calculating the similarity between the first shape descriptor and a second shape descriptor and outputting similar motion pictures" (Kan: column 2, lines 15-27; column 3, lines 28-34; column 6, lines 7-46, wherein the descriptors are compared). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the comparison taught by Kan in order to help reduce the inconvenience and help solve the problems of still object segmentation.

Regarding claim 9, note the examiners rejections for claims 1-2 and 8, and in addition, although not disclosed, it would have been obvious to use a second descriptor abstracting means (Official Notice). Doing so would have been obvious in order to provide a faster processing means by using two abstractors.

Regarding claim 10, Paek discloses "classifying the similarity in the order of distance from close to far" (Paek: column 18, lines 20-25 and 40-45; column 23, lines 15-40, wherein the motion and temporal features indicate the distance, the ranking orders the distances).

Regarding claim 11, although not disclosed, it would have been obvious to compute the similarity based on the Euclidian distance or SAD (Official Notice). Doing so would have been obvious in order to help keep the errors of the distance calculations at a minimum.

Regarding claim 18, note the examiners rejections for claims 1-2 and 8.

#### ***Allowable Subject Matter***

4. Claims 4-7 and 14-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID CZEKAJ whose telephone number is (571)272-7327. The examiner can normally be reached on Mon-Thurs and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Dave Czekaj/  
Primary Examiner, Art Unit 2621